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EXAMINER	
FISH, JAMIESON W	
ART UNIT	PAPER NUMBER
2617	

DATE MAILED: 07/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/744,200	WILF ET AL.	
	Examiner	Art Unit	
	Jamieson W. Fish	2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *02 July 2001*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-36* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-36* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *02 July 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Information Disclosure Statement

The information disclosure statement (IDS) submitted on 12-14-2001 has been considered by the examiner.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims **1-3**, **5-8**, **12-18, 23-26, 31-35** are rejected under 35 U.S.C. 102(e) as being anticipated by Lemmons (US 5,880,768).

Regarding claim **1,** Lemmons teaches a method of selecting, at a video receiver location, a desired video program channel from a number of program channels transmitting video programs comprising: automatically generating, for each of said program channels indexing data of at least one predetermined attribute based on the video program content of the respective channel (See Col. 6 lines 7-17 The transferring of schedule information to the central computer is automatically generating index data at the central computer); specifying at least one attribute corresponding to a desired program content (See Fig. 7 and Col. 13 lines 13-21); and identifying, from said

indexing data, any program channel having a match with respect to the attribute specified (See Col. 13 lines 13-67, Col. 14 lines 1-30).

Regarding claim **2,** Lemmons teaches wherein said: indexing data is generated at a remote location, is encoded and transmitted in a separate indexing channel for all said program channels, and is received and decoded at said receiver location (See Col. 6 lines 51-67, Col. 7 lines 1-65); and wherein said at least one attribute corresponding to a desired program is specified at said receiver location (See Fig. 7 and Col. 13 lines 13-67, Col. 14 lines 1-30).

Regarding claim **3**, Lemmons teaches wherein said indexing data from a plurality of channels is multiplexed into a data stream before transmission (See Col. 6 lines 12-16, 51-56 When information about multiple program channels is sent through a single frequency channel, multiplexing is inherent).

Regarding claim **5,** Lemmons teaches wherein said indexing data is tagged with a channel identification code and with a time tag (See Fig. 7 and Col. 13 lines 12-52 Index data such as theme is associated with the time and channel matching programs are being broadcasted).

Regarding claim **6,** Lemmons teaches wherein said generated indexing data includes both image and audio attributes (See Fig. 7 and Col. 14 lines 9-29 Index data includes theme. Theme is determined by image and audio attributes of program).

Regarding claim **7**, Lemmons teaches wherein one program channel is identified having the best match with respect to the attribute specified, and at least one additional program channel is identified having the next-best match with respect to the specified

attribute (See Fig. 7 and Col. 15 lines 5-30 Programs with best match according to sort attribute are displayed on the top of the list).

Regarding claim **8,** Lemmons teaches wherein, in order to assist specifying at said receiver location said at least one attribute corresponding to a desired program content, there is displayed, at said receiver location, a search menu setting forth a plurality of different attributes selectable by the user (See Fig. 7 and Col. 13 lines 12-21).

Regarding claim **12,** Lemmons teaches wherein the program channel best matching the specified attribute is displayed as a picture within a picture on the screen of the video receiver (See Fig. 10 Col. 19 lines 24-53 The video frame is a picture within a picture).

Regarding claim **13,** Lemmons teaches wherein the identification of the program channel matching the specified attribute is displayed on the screen of the video receiver (See Fig. 7 and Col. 13 lines 12-64 The channel name is displayed).

Regarding claim **14,** Lemmons teaches wherein the program channel matching the specified attribute is recorded (See Fig. 10 and Col. 19 lines 24-67, Col. 20 lines 1-44).

Regarding claim **15,** Lemmons teaches wherein a viewer at the receiver location preselects, via a user interface, whether a program channel identified as having a match with a specified attribute is to be recorded or to be immediately displayed on a video receiver at the receiver location (See Fig. 10 and Col. 19 lines 24-67, Col. 20 lines 1-44

The user selects whether the program is to be added to the scheduled viewing list or the scheduled recording list, before the program is broadcast).

Regarding claim **16,** Lemmons teaches wherein said at least one predetermined attribute is used for generating a program guide setting forth a program schedule of channels to contain a video program content based on said at least one predetermined attribute (See Fig. 7 Col. 15 lines 5-46 User can sort programs matching an attribute by time).

Regarding claim **17,** Lemmons teaches wherein said at least one specified attribute includes a particular event desired to be identified if occurring on any of said program channels (See Fig. 7 and Col. 13 lines 12-67, Col. 14 lines 1-30 Events such as movies are specified).

Regarding claim **18,** Lemmons teaches wherein said indexing data is transmitted in an indexing channel and is received and decoded at said receiver location (See Col. 6 lines 51-67, Col. 7 lines 1-65).

Regarding claim **23,** Lemmons teaches wherein the video receiver location or the server at a central control node, generates a statistical report of occurrences of said specified attribute (See Fig. 7 and Col. 13 lines 12-53 The video receiver lists a number of programs having a specified attribute).

Regarding claim **24,** Lemmons teaches wherein the specified attribute relates to a particular topic of interest, and said video receiver location or the server at the central control node, generates a summary of occurrences of said topic of interest in the video

channels (See Fig. 7, Col. 13 lines 12-67, Col. 14 lines 1-30 Listing of programs containing attribute is a summary of occurrences).

Regarding claim **25,** Lemmons teaches a method for indicating at a video receiver location, the occurrence of a particular event when occurring on any of a number of program channels transmitting video programs, comprising: automatically generating at a remote location, for each of said program channels, indexing data of the respective video programs (See Col. 6 lines 7-17 The transferring of schedule information to the central computer is automatically generating index data at the central computer); encoding and transmitting said indexing data for all said channels (See Col. 6 lines 51-65); receiving and decoding said indexing data (Col. 7 lines 10-30); specifying at said receiver location said particular event (See Fig. 7, Col. 13 lines 12-67, Col. 14 lines 1-30 User can specify programming types by time. This is specifying an event); and identifying from said indexing data each occurrence of the particular event on any of the program channels (See Fig. 7 and Col. 13 lines 12-67, Col. 14 lines 1-30 Events such as movies are displayed).

Regarding claim **26,** Lemmons teaches wherein said indexing data is transmitted in a separate indexing channel and is received and decoded at said receiver location (See Col. 6 lines 51-67, Col. 7 lines 1-65).

Regarding claim **31,** Lemmons teaches a method of generating a program schedule of desired video program channels from a number of program channels transmitting video programs of various program contents, comprising: automatically generating, for each of said program channels, indexing data of at least one

predetermined attribute based on the content of the programs to be transmitted on the respective channel, and the scheduled transmission time thereof (See Col. 6 lines 7-17 The transferring of schedule information to the central computer is automatically generating index data at the central computer); specifying at least one attribute corresponding to a desired program content, and identifying, from said indexing data, the program channels and the scheduled transmission times thereof, having a match with respect to the specified attribute to thereby produce a program schedule of said program channels (See Fig. 7 and Col. 13 lines 12-67, Col. 14 lines 1-67, Col. 15 lines 1-46).

Regarding claim **32,** Lemmons teaches wherein said indexing data is generated at a remote location, and is encoded and transmitted in a separate indexing channel for all said program channels (See Col. 6 lines 51-67, Col. 7 lines 1-65).

Regarding claim **33,** Lemmons teaches wherein said indexing data is received, decoded, and utilized at a receiver location for identifying the program channels to transmit programs having a match with respect to the specified attribute, and the scheduled transmission times thereof (See Fig. 7 and Col. 13 lines 12-67, Col. 14 lines 1-67, Col. 15 lines 1-46).

Regarding claim **34,** Lemmons teaches wherein said indexing data is received, decoded, and utilized at a central control node for identifying the program channels to transmit programs having a match with respect to the specified attribute, and the scheduled transmission times thereof (See Fig. 1 Col. 5 lines 58-67, Col. 6 lines 1-50

Head end telecasting center (central node) formats program schedule which is searchable by users).

Regarding claim **35**, Lemmons teaches wherein a plurality of attributes are specified each corresponding to a desired program content, and each program having a match with a specified attribute is identified and included, together with its scheduled transmission time, in said program schedule (See Col. 13 lines 46-52).

Claims **1**, **6**, **8**, **12**, **19-22, 25, 27-28** are rejected under 35 U.S.C. 102(b) as being anticipated by Cobbley et al. (US 5,614,940).

Regarding claim **1,** Cobbley teaches a method of selecting, at a video receiver location, a desired video program channel from a number of program channels transmitting video programs comprising: automatically generating, for each of said program channels indexing data of at least one predetermined attribute based on the video program content of the respective channel (See Col. 3 lines 27-67, Col. 4 lines 1-44); specifying at least one attribute corresponding to a desired program content (See Col. 8 lines 6-10, Col. 10 lines 7-38); and identifying, from said indexing data, any program channel having a match with respect to the attribute specified (See Col. 10 lines 7-67).

Regarding claim **6,** Cobbley teaches wherein said generated indexing data includes both image and audio attributes (See Col. 4 lines 39-44).

Regarding claim **8,** Cobbley teaches wherein, in order to assist specifying at said receiver location said at least one attribute corresponding to a desired program content,

there is displayed, at said receiver location, a search menu setting forth a plurality of different attributes selectable by the user (See Col. 10 lines 7-38).

Regarding claim **12,** Cobbley teaches wherein the program channel best matching the specified attribute is displayed as a picture within a picture on the screen of the video receiver (See Fig. 2 and Col. 11 lines 1-34 The video frame is a picture within a picture).

Regarding claim **19**, Cobbley teaches wherein said indexing data is used at a central control node for selecting programs to be transmitted to a plurality of viewer stations at a plurality of receiver locations according to the attribute specified at the respective receiver locations (See Fig. 1 and Col. 9 lines 46-67, Col. 10 lines 1-38, The single physical unit comprising 110, 112, 115, 125, 128, 130 is the central node).

Regarding claim **20,** Cobbley teaches wherein said indexing data is transmitted in an indexing channel to said central control node (See Col. 3 lines 27-67, Col. 4 lines 1-56 Indexing data is transmitted from Broadcast Source 105 to Broadcast Receiver 110 through medium for transmitting electromagnetic signals 107. Transmission of electromagnetic signals inherently involves channels).

Regarding claim **21,** Cobbley teaches wherein said central control node also uses said indexing data together with a history-profile of at least some of viewer stations, for listing the programs to be transmitted to the respective viewer stations (See Col. 9 lines 35-63 Cache manager monitors user for predetermined amount of time to determine which versions of segments are transmitted to user).

Regarding claim **22,** Cobbley teaches wherein the video receiver location generates and stores a history-profile of programs viewed at said video receiver location, and utilizes said history-profile for prioritizing the identified programs having the attribute specified (See Col. 12 lines 9-23, Client 140 is video receiver location).

Regarding claim **25,** Cobbley teaches a method for indicating at a video receiver location, the occurrence of a particular event when occurring on any of a number of program channels transmitting video programs, comprising: automatically generating at a remote location, for each of said program channels, indexing data of the respective video programs (See Fig. 1 and Col. 3 lines 27-67, Col. 4 lines 1-44, Indexing data is generated a broadcasting source); encoding and transmitting said indexing data for all said channels (See Col. 3 lines 64-67, Col. 4 lines 1-7 Encoding is inherent to electronic transmission); receiving and decoding said indexing data (See Col. 3 lines 50-59); specifying at said receiver location said particular event (See Col. 10 lines 7-38); and identifying from said indexing data each occurrence of the particular event on any of the program channels (See Col. 8 lines 6-59, Col. 10 lines 7-67).

Regarding claim **27,** Cobbley teaches wherein said indexing data is used at a central control node for selecting programs to be transmitted to a plurality of viewer stations at a plurality of receiver locations according to the attribute specified at the respective receiver location (See Col. 9 lines 46-63 Cache manager (central node) uses index information to select programs to be transmitted to clients receiver locations).

Regarding claim **28,** Cobbley teaches a method of selecting, at a plurality of viewer locations, a desired video program from a plurality of video programs transmitted

in a plurality of program channels comprising: automatically indexing, at a remote location, attributes of each of said video programs transmitted in said program channels (See Fig. 1 and Col. 3 lines 27-67, Col. 4 lines 1-44, Indexing data is generated a broadcasting source); transmitting said attributes of each of said video programs in said program channels (See Col. 4 lines 57-67, Col. 5 lines 1-50); receiving, at a central control node, the video programs and attributes thereof (See Col. 3 lines 50-67, Col. 4 lines 1-7); specifying, at each of a said viewer locations, particular attributes of a video program desired to be viewed at the respective viewer location (See Col. 7 lines 19-67, Col. 8 lines 1-67, Col. 9 lines 1-63); and utilizing, at said central control node said attributes specified at said viewer location for identifying the video programs matching said specified attributes (See Col. 9 lines 46-63).

Claim **1** is rejected under 35 U.S.C. 102(b) as being anticipated by Corey et al (5,703,655).

Regarding claim **1,** Corey teaches a method of selecting, at a video receiver location, a desired video program channel from a number of program channels transmitting video programs comprising: automatically generating, for each of said program channels indexing data of at least one predetermined attribute based on the video program content of the respective channel (See Col. 5 lines 31-67, Col. 6 lines 1-32); specifying at least one attribute corresponding to a desired program content (See Col. 4 lines 39-48); and identifying, from said indexing data, any program channel having a match with respect to the attribute specified (See Col. 7 lines 30-57).

Claims **1**, **4, 11, 36** are rejected under 35 U.S.C. 102(e) as being anticipated by Jain et al (US 6,567,980).

Regarding claim **1,** Jain teaches a method of selecting, at a video receiver location, a desired video program channel from a number of program channels transmitting video programs comprising (See Col. 2 lines 6-39): automatically generating, for each of said program channels indexing data of at least one predetermined attribute based on the video program content of the respective channel (See Col. 6 lines 42-67, Col. 7 lines 1-12); specifying at least one attribute corresponding to a desired program content (See Fig. 17, Col. 2 lines 27-30, Col. 12 lines 60-67, Col. 13 lines 1-11 Users select keyframes corresponding video is returned); and identifying, from said indexing data, any program channel having a match with respect to the attribute specified (See Fig. 17, Col. 2 lines 27-30, Col. 12 lines 60-67, Col. 13 lines 1-11 Users select keyframes corresponding video is returned).

Regarding claim **4,** Jain teaches wherein said indexing data is generated from selected key-frames of the respective video program (See Col. 12 lines 31-57).

Regarding claim **11,** Jain teaches wherein the generated indexing data is stored in a web server in the internet (See Fig. 1 Metadata Server 130 and Col. 3 lines 61-67).

Regarding claim **36,** Jain teaches wherein said video receiver is a computer connected to the Internet (See Col. 12 lines 60-67, Col. 13 lines 1-11).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claim **9** is rejected under 35 U.S.C. 103(a) as being unpatentable over Lemmons et al in view of Corey et al (5,703,655).

Regarding claim **9,** Lemmons fails to disclose wherein there are also displayed "AND", "OR" and "NOT" control functions also selectable by the user. However, having a user select "AND", "OR" and "NOT" control functions to search for content is well known in the art as taught by Corey et al. (See Col. 7 lines 30-67, Col. 8 lines 1-5). In view of the teaches of Corey, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Lemmons to display "AND", "OR" and "NOT" control functions selectable by the user to provide searching capabilities satisfying user queries (See Corey Col. 7 lines 59-63).

Claim **10** is rejected under 35 U.S.C. 103(a) as being unpatentable over Cobbley in view of Pearce et al (US 6,901,163).

Regarding claim **10**, Cobbley teaches generating index information by using an image recognition process (See Col. 4 lines 10-45). Cobbley differs from the claimed invention in that the image recognition process does not necessarily identify the occurrence of an explosion in the video program, by using indexing data including characteristic data indicative of fire-like color distribution in selected frames of the respective video program. However, identifying events in digital video frames by analyzing color data is well known in the art as taught by Pearce (See Abstract). Furthermore, Pearce teaches identifying the occurrence of fire in digital video frame

(See Col. 6 lines 43-45, Col. 6 lines 54-65). Thus, in view of the teaches of Pearce, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Cobbley wherein at least one of said attributes is the occurrence of an explosion in the video program, said indexing data including characteristic data indicative of fire-like color distribution in selected frames of the respective video program to create another way of identifying key aspects of program segments (See Col. 3 lines 60-67, Col. 4 lines 1-7, 38-39).

Claims **29-30** are rejected under 35 U.S.C. 103(a) as being unpatentable over Cobbley et al. in view of Lemmons et al.

Regarding claim **29**, Cobbley does not necessarily transmit attributes of each of said video programs in said program channels in a separate indexing channel. However, Cobbley does teach that many different methods may be employed to transmit index information (See Col. 4 lines 38-39). Transmitting indexing information in a separate indexing channel is well known in the art as taught by Lemmons (See Col. 6 lines 54-56). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Cobbley so that attributes of each of said video programs in said program channels were transmitted in a separate indexing channel as taught by Lemmons to allow for quick restoration of information in the event that the reception terminal experienced power interruption (See Lemmons Col. 6 lines 54-62).

Regarding claim **30,** Cobbley modified with Lemmons teaches wherein said central control node also uses said attributes transmitted in said indexing channel, together with a history-profile of at least some of said viewer stations, for listing the

programs to be transmitted to the respective viewer station (See Cobbley Col. 9 lines 35-63 Cache manager monitors user for predetermined amount of time to determine which versions of segments are transmitted to user).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Ahmad et al (US 6,263,507) discloses a system from browsing audiovisual information.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jamieson W. Fish whose telephone number is 571-272-7307. The examiner can normally be reached on Monday-Friday, 8:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's primary, Ngoc Vu can be reached on 571-272-7320. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JF 7-11-2005

NGOC-YEN VU
PRIMARY EXAMINER